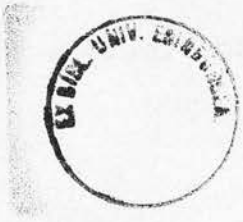
MANAGEMENT OF CHILD SEXUAL ABUSE

IN EDINBURGH 1982-1988

G M LAWSON, M.B., Ch.B.
Registrar in General Surgery
St Johns Hospital at Howden
Howden Road West
Livingston
West Lothian
EH54 6PP



Management of Child Sexual Abuse in Edinburgh 1982-1988

Over the last decade, there has been a considerable rise in the number of reported cases of alleged child sexual abuse (C.S.A.),presenting to the police surgeons in Edinburgh and the Lothians. This reflects a national and international rise in incedence, variously described as of epidemic and explosive proportions. 1,2.

The reasons for such a global increase in incedence of referal for alleged C.S.A. are multi-factorial. Medical and public awareness of the problem has been aroused by the publicity following the "Cleveland Affair", which has brought the subject up for close public scruting. Increased credence of the child's own account and disclosure, together with a professional willingness to intervene, have both lead to a far greater number of cases of alleged C.S.A. being referred.

Moreover recent reports from both sides of the Atlantic indicate a rise in the actual incidence of sexual abuse in children and adolescents in the past decade.3

Such recent heightened awareness of a problem that has been known for generations, has highlighted the pitfalls of recognition and difficulties in investigation of C.S.A. This has prompted a retrospective analysis of C.S.A. and its management in

Edinburgh and the Lothians over a seven year period (1982-1988).

Method

Hospital records at the Western General Hospital Paediatric Surgcal Unit were reviewed, together with all available records of assault reported to police surgeons attached to the Lothian and Borders Police between 1982 and 1988 inclusive.

For the purpose of this study, the definition of C.S.A. adopted was that proposed by Bamford and Roberts -" Any use of children for the sexual gratification of adults." 4,5. All cases under the age of sixteen were included. Details of the interview and clinical examination, venue, attendant specialist, format of examination and conclusions reached were noted and analysed.

Children with evidence of physical signs in the ano-genital region, suggestive of sexual abuse, were designated "positive findings" group. Conclusions drawn and documented by the attendants regarding the liklihood of sexual abuse were assessed and categorised as either ;definite evidence, no evidence or possible evidence of C.S.A.

It is emphasized that the figures quoted in this series are representative of all the official records that were available to the authors, but as such may not reflect the true incidence of the problem.6

RESULTS.

290 cases of alleged C.S.A.were reported in the seven years reviewed (1982-1988), of which 36(12%) were male and 254(88%) were female. The number of cases reported per year are shown in table 1.

The primary mode age of presentation was 15 years throughout the series. From 1986,however, a hitherto unreported secondary lower age mode appeared in the 3-5 year old group. By 1988, the last year of the study, this lower age group accounted for 32% of all cases reviewed.fig.1.

Lothian Health Board policy regarding alleged C.S.A. has involved a number of attendant specialists who assisted in the interview and clinical examination of 45% of cases. These specialists have included; genito-urinary physicians, obstetricians and gynaecologists , microbiologists , general practitioners, paediatricians and latterly, paediatric surgeons.

Arrangements regarding timing and venue of examination were coordinated by the duty police surgeon who was present in all cases.

163 children (56%) were categorised into the positive findings group following examination, 126 children (43%) showed no signs suggestive of sexual abuse. Only one child refused any form of examination. 25% of males and 60% of females showed signs consistant with the allegations of sexual abuse.

General anaesthesia (G.A.) was administered to 30

patients (10%) prior to the examination. The paediatric surgeon, who assisted in 52 examinations was the only specialist attendant to use G.A. The average age of patient in this group was 5.3 years (range 2-13 years), compared to the series as a whole (mean 9.9 years, range 1- 15 years). 18 children (60%) showed positive findings under G.A., 12 (40%) had none. All positive findings in this group would have been detected on examination without G.A.

Conclusions (vide supra) regarding the liklihood of C.S.A. having occured were made in 16 (53%) of children examined under G.A., compared to 98 (36%) children assessed without G.A. In both groups collectively, the majority conclusion was that there was no evidence of sexual abuse having occurred.

General anaesthesia allowed a more extensive examination and greater ease of instrumentation and collection of forensic specimens (tables 2 and 3). There was , however, no significant increase in either the number of additional positive physical signs elicited, or a positive return on forensic material collected.

Notably absent from the majority of cases were signs of severe trauma in the ano-genital region.

The most commonly described abnormalities were perineal, vulval or introital inflammation, one or more of which were present in 18% of the positive findings group.

Comments regarding signs of hymenal dilatation or perforation were made in 13% of the positive group and, surprisingly, signs of recent or old external hymenal trauma were documented in only 12% of cases. Vaginal dscharge (including seminal fluid in 2 cases) and inflammation were found in 11% and 8% respectively.

Throughout the last 5 years of the study, the percentage of children who were found to have positive signs has remained

relatively constant (mean 55%, range 50-60%), this is in contrast to a reduction in the percentage of examinations on which a conclusion was drawn, i.e. a drop from 57% to 26% over the seven years studied. The paediatric surgeon/police surgeon team was more likely to draw a conclusion following examination than any other attendant specialist/police surgeon team.

Discussion

In 1984, the Lothian Health Board Regional Review Committee advocated an increasing involvement of the Paediatric Surgeons in cases of alleged C.S.A. This is reflected in the shift away from examinations in Police Stations, Gynaecology departments and Casualty rooms, towards a more suitable environment -that of the Paediatric Surgical unit.

It was considered that the paediatric surgeon would be more familiar with female pre-pubertal anatomy. In addition he would have ready access to general anaesthesia (originally thought to have a much more important role in assessment of C.S.A.).

Much of the recent rise in cases of alleged C.S.A.can be attributed to the recognition of the great importance of the history given by the child and the acceptance at a prima facii level of the childs own account and disclosure. In the majority of cases,the history is an important tool in determining whether or not C.S.A.has occurred. Such is the spectrum of conditions encompassed by the term C.S.A., that only a small proportion of cases have the potential to exhibit any physical findings.Of these, few provide little more than corroborative evidence. 6,7& 8.

Currently,a major problem is the lack of normative data on pre-pubertal anatomy. This renders the assessment and interpretation of perineal findings largely subjective and to a large extent based on the experience of the examiners.

If one considers the childs own account, children seldom lie. 1,2. Problems can however be encountered if a child is repeatedly interviewed and having been fed with information through leading questions, will embroider the story given at subsequent interviews .Similarly, a child who uses adult and sexually explicit terms should be regarded with caution and an explanation should be sought from the child as to the meaning and interpretation attributed to such terms.

Levitt advocates a single history taker and examiner- the history to be taken initially with ,then without the primary carer. This aids the gradual transfer of trust,culminating in a relaxed, non-threatening examination.

The presence of the primary carer can, on occasion, be detrimental to the investigation. A lazy or reticent child may rely on mother to speak on her behalf, or fill in the gaps. In other instances, a child may be reluctant to speak in front of

her parents, because of embarrasment 7 , or if the primary carer was aware of C.S.A. but afforded the child little or no protection.

The perineal examination should be part of a complete physical medical examination. This affords a more thorough assessment of the child, and is usually better tolerated than a perineal examination alone. Indeed, if we consider the child's perception of the investigation of C.S.A., 25% of children perceived the the examination to be just as "bad" as, or distressing as the initial assault. At what point does a thorough assessment of C.S.A. become further assault? 2

Although a standardised medico-forensic examination for all cases of alleged C.S.A. would seem attractive, it is necessary to match the intrusiveness and extensiveness of the professional evaluation with the level of suspicion that exists in each case. (Independent Second Opinion Panel). This further emphasises the importance of a thorough ,detailed and carefully taken history. 4,7 & 8.

The introduction of the paediatric surgeon as a member of the primary investigation team resulted in more examinations under general anaesthesia. This allowed for both a more intrusive examination, and collection of more forensic and micrological samples. Some children underwent examination both with and without G.A. Significantly, no further information was obtained in the examinations performed under G.A.. Despite ease of instrumentation and access to internal genitalia, no comment was ever made regarding the state of the vagina in the 30 cases undergoing G.A.

Due to the lack of any significant benefit from examination

under G.A., the number of G.A.s performed has declined sharply. Indeed , in 1988, general anaesthesia was not used at all in assessing C.S.A. at the Western General Hospital and we would conclude that the only indication for general anaesthesia is in assessing the seriously injured child.

In the light of recent controversy, it is worth noting that in 290 cases of alleged C.S.A., no mention was ever made of Reflex Anal Dilatation, and hymenal diameter is mentioned less than 10 times. This undoubtedly reflects the difficulty in identifying and interpreting such signs. 9,10 & 11.Indeed, it has been our experience and that of others that the majority of children who have undergone anal dilatation under G.A. as a treatment for dietary induced constipation and anal fissuring, exhibit few of the manifestations of anal abuse described by Hobbs and Wynne. 12

In terms of hymenal state, such is the wide range of anatomical variants, that an apparently intact hymen,especially the crescentic or denticulate, does not exclude the possibility of digital penetration. In our experience, the use of Glaister's Rods has not significantly improved hymenal evaluation. Hymenal diameter fluctuates readily during an examination, so an inaccurate measurement does not justify the distress caused in attempting to measure it . The general appearance of the hymen i.e. perforated, dilated or traumatised, would be of greater clinical importance. In those cases where the examiner concluded definite or possible C.S.A., hymenal trauma was the single most common finding, and yet evidence of gross trauma was significantly absent in this series - mild and subtle changes being more commonplace.The most frequent finding was that of perineal, vulval or introital inflammation. This must be regarded

is one end of the spectrum of normality in the pre-pubescant female perineum. 8,13.

The acquisition of microbiology swabs and forensic samples varied with examiner.(see table 4)

The higher number of swabs taken by the Gynaecologists did not, however, give a higher rate of conclusions as to the possibility of C.S.A. Despite the wide range of swabs and samples collected, no reference is made to specific seminal markers such as P 30 (seminal glycogen) ,seminal prostaglandins or acid phosphatase assay, although spermatozoa identified on microscopy lead to a conclusion of definate C.S.A. in 2 cases.

The timing of investigations following alleged C.S.A. will determine the number and type of sample collected. Generally 72 hours was regarded to be the upper time limit for sperm microscopy. Enos, however,indicates that sperm may be present and identifiable for up to 5-10 days post-assault using the Papanicolacu technique.

The bacteriology swab remains a useful indicator of C.S.A. having occured. The finding of gonococcus on vaginal or introital swab indicates definate C.S.A. The incidence of gonococcus being isolated is diminishing - more often , Chlamydia is isolated from vaginal swabs. This reflects the changing spectrum of sexually transmitted disease in the community. 14.

Over the last decade, we have seen the increasing role of serology , with particular reference to the H.I.V.virus and sero-conversion (as well as the routine V.D.R.L. screen).

Conclusions

The investigation of C.S.A. in Ediburgh and the Lothians has progressed significantly over the last 7 years reviewed. Audit of the management of C.S.A. over this period has enabled us to identify certain crucial points;

LOCATION	Paediatric Surgical Department
EXAMINERS	Police Surgeon AND Paediatric Surgeon This allows corroborative statements to be made and the child only has to endure one examination.
HISTORY	The importance of this cannot be over emphasised.Most diagnoses of C.S.A. are made on the history and child's disclosure. The resulting index of suspicion will determine the intrusuveness of the ensuing examination.
EXAMINATION	This requires a full medical examination, without the need for G.A. Further normative data on pre-pubertal perineums is needed,as well as a standardisation of anatomical and pathological description.The introduction a "Paediatric Rape Kit" would standardise forensic, bacteriology and serology samples taken.

The role of the examination team has evolved from simply that of a technician providing legally acceptable evidence , to that of an expert witness. The examination team are now being asked to

give their opinion - a conclusion- as to whether or not C.S.A. occured. This highlights the importance of having two examiners present,for as we now know, the diagnosis of C.S.A. has far reaching implications and should not be made by one person alone.

Im court the presentation of the investigation of each case of alleged C.S.A. should be made by the Police Surgeon (more familiar with court procedings) and in layman's terms.

Should we now challenge Woodling's theory, that whether or not C.S.A.has occurred is for the courts to decide and not a medical diagnosis ? 13

Finally,future developments in the management and handling of C.S.A. must progress in two further areas, namely prevention and early recognition of children at risk. The main thrust of this lies in education of both the child and the investigation teams. In West Lothian, a pilot programme has been introduced entitled "Feeling Yes - Feeling No" .This centres around a short film aimed mainly at primary school children to give the child the necessary skills that will help protect them from C.S.A.

It is hoped that the child, as a result , will be able to identify normal or appropriate physical contact between people and to describe their feelings when they are touched in a way they either like or dislike-"Feeling Yes -Feeling No". The next aim of the project is to inform the child of who they can approach if they are experiencing "No Feelings",and to realise that they are not "bad" for seeking help or disclosing their "No Feelings".

In 1988,the Police Woman and Child Unit of Lothian and Borders Police undertook to form a special unit of women police officers concentrating on the problem of C.S.A. The function of the unit would be not so much investigative as supportive. These

W.P.C.s would receive further training in the signs and anatomy of C.S.A., develop interview and counselling skills and offer help and support to the child victim during the police phase of the investigation. In addition the unit would serve to provide continuity in liason with other agencies involved in managing suspected C.S.A.

REFERENCES

1. Hobbs,C.J. and Wynne,J.M.
   Management of Sexual Abuse.
   Archives of Disease in Childhood 1987, 62, 1182-1187.

2. Zeitlin,H.
   Investigation of the Sexually Abused Child
   The Lancet, Oct 10 1987, 842-847 .

3. Peters,S.D., Wyatt, G.E., Finkelhor,D.
   A Sourcebook on Child Sexual Abuse. Beverly Hills, Saga
   Publications 1986.

4. Independant Second Opinion Panel, Northern Regional Health
   Authority (Oct. 1987)
   Child Sexual Abuse : Principles of Good Practice.
   British Journal of Hospital Medicine, Jan 1988, 54-62.

5. Bamford,F. and Roberts,R.
   A B C Of Child Sexual Abuse.
   British Medical Journal Vol 299, 29 July 1989.

6 D.H.S.S. Standing Medical Advisory Committee.
   Diagnosis of Child Sexual Abuse : Guidelines for Doctors.
   1988 London H.M.S.O.

7. Levitt,C.J.

Sexual Abuse in Children - A Compassionate Yet Thorough Approach to Evaluation.

Post Graduate Medicine, Vol.80. No 2 Aug 1986 ,201-215.

8. ,Hermann-Giddens,M.E.. and Frothingham,T.E.

Prepubertal Female Genitalia : Examination for Evidence of Sexual Abuse.

Paediatrics, Vol.80. no.2, Aug 1987, 203-208.

9. Clayden, G.

Anal Appearances and Child Sexual Abuse.

The Lancet, March 14 1987 , p.620.

10. Roberts, R.,

Sexual Abuse of Children in Leeds

British Medical Journal, Vol.292, June 7, 1986, p1527.

11. Stanton,A., Sutherland, R.

Prevalence of Reflex Anal Dilatation in 200 Children.

British Medical Journal, Vol.298, March 25,1989, 802-3.

12. Hobbs,C.J., Wynne,J.M.

Buggery in Childhood - A Common Syndrome of Child Abuse.

The Lancet, October 4,1986, pp792-796.

13. Enos,W.F. et al

Forensic Evaluation of the Sexually Abused Child.

Pediatrics. Vol 78, Sept 1986, no.3, 385-398.

14. Fuster.C.D., Neinstein,L.S.

Vaginal Chlamydia Trachomatis: Prevalence in Sexually Abused Pre-pubertal Girls.

Pediatrics, Vol.79, no.2 ,Feb 1987, 235-238.

TABLE I

YEAR	1982	1983	1984	1985	1986	1987	1988
No of alleged cases C.S.A.	4	23	19	40	43	52	103
EXAMINATION TEAM							
Police Surgeon Alone	4	13	15	35	32	25	46
Police Surgeon & Gynaecologist	–	10	3	3	8	4	18
Police Surgeon & Paediatric Surgeon	–	–	1	2	1	14	39
Police Surgeon & Paediatrician	–	–	–	–	2	7	4
Police Surgeon & General Practitioner	–	–	–	–	–	1	1
Police Surgeon & Bacteriologist/Genito-Urinary	–	–	–	–	–	1	1

TABLE 2

EXAMINATION & INSTRUMENTATION	GENERAL ANAESTHETIC (30 Cases)				WITHOUT GENERAL ANAESTHETIC (264 cases)			
	No. CASES	%	+ VE EXAM	- VE EXAM	NO. CASES	%	+ VE EXAM	- VE EXAM
External	30	100	18	12	263	99	150	113
Per Vaginal	12	40	9	3	48	18	43	5
Per Rectal	16	53	11	5	93	35	47	46
Vaginal Speculum	5	16	4	1	27	10	26	1
Proctoscopy	6	20	2	4	3	1	2	1
Vaginoscopy	1	3	1	0	0	0	0	0
Photography	4	13	3	1	1	0.3	1	0

TABLE 3

RECORDED FORENSIC OR MICROBIOLOGY SAMPLE	GENERAL ANAESTHESIA		WITHOUT GENERAL ANAESTHESIA	
	No. Cases	%	No. Cases	%
M.S.S.U.	1	3	12	4
High Vaginal Swab	13	43	56	21
Anal Swab	11	36	17	6
Urethral Swab	2	6	3	1
Scalp Hair	0	0	32	12
Pubic Hair	0	0	31	11
Saliva	0	0	26	9
Blood Serology	1	3	30	11
Throat Swab	1	3	2	0.7
Blood Alcohol	0	0	4	15

TABLE 4

EXAMINER(S)	NO OF CASES EXAMINED	TOTAL SAMPLES COLLECTED	SAMPLES EXAM
Police Surgeon Alone	169	93	0.5
Police Surgeon & Gynaecologist	47	171	3.6
Police Surgeon & Paediatric Surgeon	52	38	0.7

Age Distribution in 1988
(fig. 1)